NOTES ON HYBRIDISM IN THE GENUS BRACHYCHITON.

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Cases of Hybridisation among Australian Plants are as yet but few on record. Instances therefore of natural cross-fertilization, when they come under our notice here, are of particular interest. Through the circumspect kindness of Dr. J. C. Cox, lately, a Hybrid between *Brachychiton populneum* and *B. acerifolium* was brought under my cognizance. It arose in Dr. Cox's brothers garden, where both the parent plants are up-grown; but it may have been obtained as a seedling from another place, both the indicated *Brachychiton*, which are beautiful shade trees of ready growth, being much reared in New South Wales. The Bastard-tree attained already a height of 40 feet and a stem diameter of one foot. The leaves differ in a marked manner from those of the parental species being of a more or less ovate shape or verging somewhat into a lanceolar form; but so far as seen by me they are quite lobeless, nor are they conspicuously acuminated. The leaf stalks are considerably elongated and not very slender. The panicle is ample, much like that of *B. acerifolium*, bearing numerous flowers; the articulation of the stalklets is at some distance from the calyx also as in *B. acerifolium*, not generally close to the calyx as in *B. populneum*. The color of the calyces holds the middle between that of the respective organ of the parent plants; it is pale yellowish outside much as in *B. populneum*, but inside crimson and not sprinkled as in *B. acerifolium*, according to a painted drawing furnished by Mrs. Ford. Fruits, so rarely developed by hybrids, have not been produced. For distinctive appellation in accordance with generally recognised rules the

name *Brachychiton populneo-acerifolium* might be chosen for this highly interesting cross-production, the preponderance of resemblance being rather with *B. acerifolium* than with *B. populneum*.

It is worthy of remark, that from the whole extensive order of *Sterculiaceæ* only one instance of spontaneous hybridisation is on record, Mr. O. Tepper having discovered a cross between *Lasiopetalum Baueri* and *L. discolor* in South Australia. In the recent special work by Dr. W. O. Foske (Die Pflanzen Mischlinge, 1881) mention is however made of artificial crosses among the South African *Mahernias*, and doubtless in that genus as well as in *Hermannia* natural bastards could be found also.

This seems an apt apportunity to state that *Brachychiton acerifolium* has been traced recently by Mr. W. Bäuerlen as far south as Shoalhaven, where this assiduous collector gathered also the following plants, which were not proviously noticed so far south : *Philotheca australis*, *Sida rhombifolia*, *Poranthera ericifolia*, *Elatostemma reticulatum*, *Pennantia Cunninghami*, *Vitis clematidea*, *Pultenaea elliptica*, *Hovea linearis*, *Zornia diphylla*, *Ceratophyllum gummiferum*, *C. apetalum*, *Melaleuca styphelioides*, *Kunzea capitata*, *Eugenia myrtifolia*, *Trachymene linearis*, *Actinotus minor*, *Conospermum tennifolium*, *Cassinita quinqueforia*, *Goodenia heterophylla*, *Candollea laricifolia*, *Chloanthus Stoechadis*, *Clerodendron tomentosum*, *Tricoryne simplex*, *Aneilema acuminatum*, *Gymnostachys anceps*, *Paspalum scrobiculatum*.